

10-24-05

PTO/SB/92 (12-97)

Approved for use through 9/30/00. OMB 0651-0031  
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



## Certificate of Mailing under 37 CFR 1.10

Express Mail Label No. EV 636913023 US

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to:

COMMISSIONER FOR PATENTS  
Mail Stop - Appeal Briefs Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Docket No. NETS0044

on 21 October 2005

Date

Signature

Della Revecho

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Attached to this cover-sheet please find the following documents:

- Certificate of Mailing (1 page)
  - Response to Notification of Non-Compliant Appeal Brief (1 page, in duplicate);
  - Fee Transmittal (1 page, in duplicate);
  - Appeal Brief (27 pages);
  - APPENDIX A - Applicant's Claims;
  - APPENDIX B - Applicant's Figures;
  - APPENDIX C - Non-Final Office Action, dated 27 August 2004;
  - APPENDIX D - Final Office Action, dated 10 February 2005;
  - APPENDIX E - U. S. Patent Application No. 5,400,248;
  - APPENDIX F - U. S. Patent Application No. 4,210,962; and
  - Return Postcard
- (The above documents are being submitted in triplicate)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Tribble  
Serial No. : 09/668,125  
Filed: 21 September 2005  
Title: Business Rules System  
Date: October 21, 2005



Docket No.: NETS0044  
Art Unit: 3626  
Examiner: Frenel, Vanel

Commissioner for Patents  
Mail Stop - Appeal Brief Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Response to Notification of Non-Compliant Appeal Brief (37 CFR 41.37)**

Sir:

Responsive to the Notification of Non-Compliant Appeal Brief, mailed on 21 September 2005, Applicant submits herewith, in triplicate, a revised Appeal of Brief. In particular, Applicant has addressed items 4 and 10 of the above-identified notification. Thus, the summary of claims matter now refers to the specification by page and line number and to the drawings, as appropriate, by reference characters. Additionally, in Claims 4, 8, 11, 15, and 18, every means plus function element (35 USC 112 paragraph 6) is identified in the structure, material, or acts described in the specification as corresponding each claim element are set forth with reference to specification by page and line number, and to the drawings, as appropriate, by reference characters.

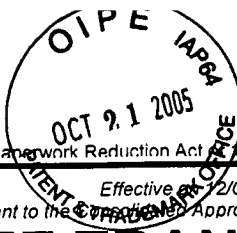
The Commissioner is authorized to charge the Appeal Brief fee of \$500, any additional fees due, and credit any overpayments to the Glenn Patent Group Deposit Account No. 07-1445, Customer No. 22862. Applicant considers this document to be filed in a timely manner.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael A. Glenn".

Michael A. Glenn  
Reg. No. 30,176

Customer No. 22,862



Effective 12/08/2004.

Fees pursuant to the Trademark and Patent Fee Schedule, 37 CFR 1.16 and 1.17, and the Trademark and Patent Fee Schedule, 37 CFR 1.16 and 1.17.

# FEE TRANSMITTAL

## For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 500.00

**Complete if Known**

Application Number	09/668,125
Filing Date	09/21/2000
First Named Inventor	Tribble
Examiner Name	Vanel Frenel
Art Unit	3626
Attorney Docket No.	NETS0044

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☒ Deposit Account Deposit Account Number: 07-1445 Deposit Account Name: Glenn Patent Group

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180
<b>Total Claims</b>		
- 20 or HP = _____ x _____ = _____		
HP = highest number of total claims paid for, if greater than 20.		
<b>Indep. Claims</b>		
- 3 or HP = _____ x _____ = _____		
HP = highest number of independent claims paid for, if greater than 3.		

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____	_____	_____

- 100 = \_\_\_\_\_ / 50 = \_\_\_\_\_ (round up to a whole number) x \_\_\_\_\_ = \_\_\_\_\_

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Filing a brief in support of an appeal (1402) 500.00**SUBMITTED BY**

Signature	<u>[Signature]</u>	Registration No. (Attorney/Agent) 30,176	Telephone 650-474-8400
Name (Print/Type)	Michael A. Glenn		Date 21 October 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**Certificate of Transmission Under 37 C.F.R. §1.10**

**Express Mail Label : EV 636913023 US**

**Date of Deposit: 21 October 2005**

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner

Commissioner for Patents

Mail Stop – Appeal Brief Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Date: 21 October 2005

Printed Name: Della Revecho

Signature: \_\_\_\_\_

**BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BOARD OF APPEALS AND INTERFERENCES**

---

In re Application of	:	Tribble
Serial No.	:	09/668,125
Filed	:	9/21/00
Art Unit	:	3626
Examiner	:	Frenel
Title	:	Business Rules System
Atty. Docket No.	:	NETS0044

---

Honorable Commissioner of Patents and Trademarks  
P O Box 1450  
Alexandria, VA 2231301450

**BRIEF ON APPEAL**

This is an appeal from the Primary Examiner of Group Art Unit 3626 refusing Claims 1-4, 6-11, 13-18, 20, and 21 set forth in APPENDIX A hereto.

## TABLE OF CONTENTS

REAL PARTY IN INTEREST.....	5
RELATED APPEALS AND INTERFERENCES.....	5
STATUS OF CLAIMS.....	5
STATUS OF AMENDMENTS.....	5
SUMMARY OF CLAIMED SUBJECT MATTER.....	5
GROUND OF REJECTION TO BE REVIEWED ON APPEAL .....	9
APPLIED PRIOR ART REFERENCES .....	9
THE ISSUES.....	9
GROUPING OF CLAIMS .....	10
ARGUMENT AND DISCUSSION.....	10
CONCLUSION .....	27
APPENDIX A - Applicant's Claims	
APPENDIX B - Applicant's Figures	
APPENDIX C - Non-Final Office Action, dated 8/27/04	

APPENDIX D - Final Office Action, dated 2/10/05

APPENDIX E - U.S. Patent No. 5,400,248

APPENDIX F - U.S. Patent No. 4,210,962

### REAL PARTY IN INTEREST

The subject application was assigned to American Online, Inc., a corporation of the state of Delaware. The assignment to was recorded in the U.S. Patent & Trademark Office on the date of 2/6/01, at Reel 11532, Frame 238.

### RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are known to be related to the subject patent application.

### STATUS OF CLAIMS

The application was originally filed with Claims 1-21. Claims 5, 12, and 19 have been canceled. Therefore, Claims 1-4, 6-11, 13-18, 20, and 21 are pending in the application.

Claims 1-4, 6-11, 13-18, 20, and 21 stand rejected; these claims are being appealed.

### STATUS OF AMENDMENTS

Amendments were submitted 2/10/04, 7/7/04, and 11/29/04, and have been entered by the Examiner.

### SUMMARY OF CLAIMED SUBJECT MATTER

The invention provides a business rules system. The system creates dynamic solution sets in response to interactions between real-world objects. In addition, the invention provides a system that allows the user to easily create and maintain the rules describing and governing a business system.

A preferred embodiment of the invention creates a dynamic solution set between objects that have never been associated with one another prior to that particular instance of evaluation. A rule engine evaluates the associated objects. The rule engine is



programmed to evaluate a complex situation, come up with a solution and, as a result, not require the intervention of a human being.

The invention's rule engine enables the user to customize the behavior of business objects (e.g., access control, order management, catalogs, and membership) to meet sophisticated business requirements. The invention provides a graphical user interface that allows a user to rapidly set up and maintain Business Rules in real time - with no source code recompilation needed. Domain tables are used to define the overall set of possible values for a given attribute of an object.

Each rule may have one to many classes of interacting objects. A voter is a member or business object such as a product, price list, or ship-to location that provides input to be evaluated by the rule. Each instance of a voter may have a data value (vote) for a specific rule. Voters also have a hierarchical inheritance.

Rule resolution strategies are used by the invention to resolve any conflicts between specific preferences of voters and to determine the correct answer to be used in an application program. The sequence of business objects and the order of the values included in each object determine the values of the results. The rule resolution logic returns only one answer for a question that references a set of business objects.

The following provides a summary of the claimed matter, referring to the specification by page and line number and to the drawings, as appropriate, by reference characters. Additionally, in Claims 4,8,11,15, and 18 every mean plus function element (35 USC 112 ¶(6)) is identified, and the structure, materials, or acts described in the specification as corresponding to each claimed function is set forth with reference to the specification by date and line number and to the drawing, as appropriate, by reference characters:

1. A process for evaluating business objects (page 6, lines 11-14; page 9, lines 10-20) with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine (page 6, lines 6-9; page 23, lines 8-20; Fig. 9:904; Fig. 10:105)

wherein said rule engine evaluates said business object (page 6, lines 6-10; Fig. 1:103);

providing administration means for allowing a user to maintain preferences for a specific instance of a business object (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);

wherein said rule engine uses business rules (page 10, lines 10-23) to evaluate a relationship between said business objects;

wherein each business object is a voter (page 14, lines 8-24) that provides votes that are evaluated by said business rules;

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set (page 16, line 31 to page 18, line 23; Fig. 5A and 5B: 502, 505-516); and

wherein a sequence of voters and an order of the votes included for each voter determine values in said solution set (page 19, lines 19-23).

4. The process of claim 1, further comprising the step of:

providing rule administration means for allowing a user to define business rule attributes (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);.

8. An apparatus for evaluating business objects (page 6, lines 11-14; page 9, lines 10-20) with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising:

a rule engine (page 6, lines 6-9; page 23, lines 8-20; Fig. 9:904; Fig. 10:105);

wherein said rule engine evaluates said business objects (page 6, lines 6-10; Fig. 1:103);

administration means for allowing a user to maintain preferences for a specific instance of a business object (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);

wherein said rule engine uses business rules to evaluate a relationship between said business objects(page 10, lines 10-23);

wherein each business object is a voter that provides votes that are evaluated by said business rules(page 14, lines 8-24);

rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set(page 16, line 31 to page 18, line 23; Fig. 5A and 5B: 502, 505-516); and

wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set(page 19, lines 19-23).

11. The apparatus of claim 8, further comprising:

rule administration means for allowing a user to define business rule attributes (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803).

15. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for evaluating business objects (page 6, lines 11-14; page 9, lines 10-20) with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine (page 6, lines 6-9; page 23, lines 8-20; Fig. 9:904; Fig. 10:105)

wherein said rule engine evaluates said business objects (page 6, lines 6-10; Fig. 1:103);

providing administration means for allowing a user to maintain preferences for a specific instance of a business object (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);

wherein said rule engine uses business rules to evaluate a relationship between said business objects (page 10, lines 10-23);

wherein each business object is a voter that provides votes that are evaluated by said business rules (page 14, lines 8-24);

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set (page 16, line 31 to page 18, line 23; Fig. 5A and 5B: 502, 505-516); and

wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set (page 19, lines 19-23).

18. The method of claim 15, further comprising the step of:

providing rule administration means for allowing a user to define business rule attributes (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);.

#### GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-4, 6-11, 13-18, 20, and 21 were rejected under 35 USC 103 as being unpatentable over USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh).

The foregoing rejections were made in the non-final Office Action, dated 8/27/04, which is enclosed under Appendix C. These rejections have been maintained in the final Office Action, dated 2/10/05 (Appendix D).

#### APPLIED PRIOR ART REFERENCES

For ease of reference, USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh) are shown in Appendices E and F, respectively.

#### THE ISSUES

The sole issue in this appeal is whether:

Claims 1-4, 6-11, 13-18, 20, and 21 were properly rejected under 35 USC 103 as being

unpatentable over USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh).

#### GROUPING OF CLAIMS

The claims stand or fall together.

#### ARGUMENT AND DISCUSSION

##### Subparagraph (i) B 35 USC 112, FIRST PARAGRAPH

No grounds of rejection exist under this subparagraph.

##### Subparagraph (ii) -- 35 USC 112, SECOND PARAGRAPH

No grounds of rejection exist under this subparagraph.

##### Subparagraph (iii) -- 35 USC 102

No grounds of rejection exist under this subparagraph.

##### Subparagraph (iv) -- 35 USC 103 REJECTIONS

The Office Action dated 8/27/04 rejected Claims 1-4, 6-11, 13-18, 20, and 21 under 35 USC 103 as being unpatentable as follows:

Claims 1-4, 6-11, 13-18, 20, and 21 were rejected under 35 USC 103 as being unpatentable over USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh).

Applicants previously traversed, and presently appeal these rejections. The Office Action of 2/10/05 maintained the previous grounds of rejection. The claims are patentable as-is,

because the Examiner has failed to satisfy the requirements to establish a *prima facie* case of obviousness, as discussed in greater detail below.<sup>1</sup>

First, the *prima facie* obviousness case is incomplete because, even if the references were to be combined as suggested (albeit improperly, as discussed below), the combination still does not teach or suggest all the claim limitations.<sup>2</sup> To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.<sup>3</sup>

All words in a claim must be considered in judging the patentability of that claim against the prior art.<sup>4</sup> In the following, Applicant will address the claims that are rejected by the Examiner. It is respectfully submitted that these claims are not obvious to a person skilled in the art when considering the Examiner's proposed combinations.

#### Claim 1

The Examiner has stated (Office Action, dated 8/27/04), with regard to Claim 1, Chisholm discloses:

providing a rules engine;

(col. 5, lines 17-35: the Examiner interprets Chisholm's voter administrator program to be a form of "rules engine": in the Office Action of 2/10/05, the Examiner further stated that he

---

1 MPEP 2142.

2 MPEP 2142, 2143.03.

3 *Ex Parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). MPEP 706.02(j).

4 *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). MPEP 2143.03.

has “relied upon Chisholm for the teaching of “each business object being a voter (See Chisholm, col. 5, lines 12-34) that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of votes determines values in a solution set (See Chisholm, col. 9, lines 35-50; col. 10, line 55-68 to col. 11, line 3) which correspond to Applicant (*sic*) claimed feature.” As discussed below, this is not what Chisholm teaches.)

wherein said rules engine evaluates said business objects;

(col. 5, lines 23-34: the Examiner interprets “votes” as “business objects.” Again, as discussed below, this is a mischaracterization of “votes” as taught by Chisholm and “business objects” as taught by Applicant. They are in no way analogous.)

providing administration means for allowing a user to maintain preferences for a specific instance of a business object;

(col. 5, lines 12-34)

wherein said rule engine uses business rules to evaluate a relationship between said business objects;

(col. 5, lines 55-68: the Examiner understands conditional votes are votes having a relationship to other votes. Again, as discussed below, the Examiner is clearly mistaken.)

wherein each business object is a voter that provides votes that are evaluated by said business rules;

(col. 5, lines 12-34)

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and

(col. 5, lines 55-65; col. 8, lines 10-44)

wherein a sequence of voters and an order of the votes included for each voter determine values in said solution set.

(col. 9, lines 35-50; col. 10, lines 55-68 to col. 11, line 3)

The Examiner acknowledges that Chisholm does not “disclose a process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment.” Nonetheless, the Examiner finds this aspect of the invention set forth in Claim in Marsh (col. 3, lines 8-11; col. 4, lines 22-28).

With regard to Claim 1, the proposed combination of references fails to teach the claimed invention. Looking at the cited references, Chisholm discloses a voting system that allows voters to express and cast votes that are conditional on the votes of others of a voting group. Chisholm fails to teach or suggest providing a rule engine, which evaluates business objects with no prior association and uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set, as claimed in independent Claim 1.

Marsh does not remedy any of the deficiencies of Chisholm. Marsh discloses a parallel/pipeline processor designed to rapidly solve optimization problems with dynamic programming. Marsh fails to teach or suggest providing a rule engine, which evaluates business objects with no prior association and uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set, as claimed in independent Claim 1.



Furthermore, Chisholm fails to teach or suggest a combination with Marsh and Marsh fails to teach or suggest a combination with Chisholm. Chisholm discloses a voting system for casting and tabulating votes and displaying the results, while Marsh is concerned with processors having parallel pipeline architecture. It would be impermissible hindsight based on Applicant's own disclosure to incorporate the teachings of Marsh into Chisholm. Moreover, such a combination would still fail to teach or suggest providing a rule engine, which evaluates business objects with no prior association and uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set, as claimed in independent Claim 1.

The following sets forth those sections of Chisholm and Marsh that are relied upon by the Examiner in rejecting the claimed invention, with Applicant's comments in [brackets]:

#### Chisholm

col. 5, lines 12-34:

FIG. 3 is a flowchart of the preferred embodiment of the invention. In this case voting begins when an individual, the proposal originator, develops one or more vote proposals. A vote proposal may take many forms. It may be able to be voted on affirmatively or negatively, or it may contain multiple alternatives that can be prioritized, that is, ranked, by voters. A vote administrator is a person or program charged with specifying terms and conditions of a voting. The vote administrator may be the same as, or different from, the proposal originator. Either the proposal originator or the vote administrator must enter the proposal into the system in electronic form (step A). In the preferred embodiment the proposal is entered by keyboard. If the proposal is entered by the originator, the system makes it available electronically to the vote administrator, for example on a computer screen. Either

before or after proposals are submitted, the vote administrator specifies the terms and conditions for the votes (step B), such as who may vote, voting deadline(s), and constraints, if any, on allowed vote types. The voting system then notifies members of the group through the voting units or through other means that there are one or more proposals to be voted on (step C).

[Comment: this teaching concerns a human-mediated system the requires a human vote administrator and a set of human voters. In Claim 1, a "rules engine" performs the function of evaluating "business objects." The rules engine is not a human, nor are Applicant's business objects humans.]

col. 5, lines 55-68:

The system then processes the votes to compute their values (represented as signals). Depending upon the types of votes allowed by the vote terms (specified by the vote administrator) and upon the specific votes cast by the voters, the processing performed will vary. As shall be seen below, a processed vote may have either a unique computed value, multiple values, or no meaningful value (i.e., no solution). An unconditional vote always has a unique value--either yes, no or abstain--but a conditional vote may have either a unique value, multiple values, or no meaningful value. The vote terms determine, among other things, how multiple values and no meaningful values of votes are handled. For example, if the computed value of a vote is either yes or no, the terms may specify that "yes" will always be selected and presented as output. This approach can help build consensus among the voters. Or, the terms may specify that both values must be presented as output. If a vote has no meaningful computed value, the terms may specify that this fact be presented as output, or they may specify that the voter who casts that vote change his or her vote. Votes that have multiple computed values are called herein indeterminate. Votes that have no meaningful values or solutions are called herein unresolvable.

[Comment: this passage teaches tabulation of human-entered votes: it has absolutely nothing to do with a computer evaluating a relationship between business objects.]

col. 8, lines 10-44:

The terms set by the vote administrator determine whether the system presents or reports all or a subset of the multiple solutions, when they arise. In the interest of consensus, the default assumption where a group of votes has multiple solutions is usually the one with the most yeses.

The vote administrator may specify any of the following output alternatives: i) present all solutions; ii) present all solutions that meet certain criteria, such as all solutions with three or more yeses; or iii) present only those solutions with either the most yeses or the most nos; or iv) present an "average" of all solutions. In addition to any of these four alternatives, the system can recommend to voters whose votes cause the multiple solutions how their votes can be modified to eliminate multiple solutions.

A different problem is encountered in the following scenario:

Voter #1 votes yes if #2 votes yes; else, no.

Voter #2 votes no if #1 votes yes; else, yes.

Restating this example more simply, A votes the same as B, and B votes the opposite of A. There is no solution. Allowing voters to vote opposite the way of others can lead to this result. These votes are called unresolvable.

In these cases, the system reports whose votes contain no solution, either to only the individuals casting those votes or to the group as a whole, depending upon the terms of the vote. One or both of the voters need to change their votes to make a solution possible. A partial solution is a subset of all of the votes that have a solution. When

there are unresolvable votes, the voting system identifies the partial solutions with the most votes, and identifies the unresolvable votes.

[Comment: Applicant has used the terminology "voter" and "vote" to refer to a weighting given the business objects. The Examiner has conflated the Applicant's meaning with that of a human voter. In Chisholm, human voters vote; in the claimed invention, business objects are weighted to resolve conflicts in determining a solution set for a business problem. In this regard, a few definitions from Applicant's specification will contrast the invention with Chisholm:

### What Are Rules?

Business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data. Business rules determine:

- privileges - what a user can create, view, update, select, or delete.
- application of business processes - what processes are accepted, such as buying with credit cards.
- business relationships - relationships between selling and buying companies, e.g., what price list is used when Catalog X is selected or where the item is shipped to or from.
- choices and default values - the defaults for options such as ship-to address or payment methods. (page 10, lines 10-23)

### Rule Components

The main components of a rule are:

- voters

- votes
- resolution strategy

A voter is a member or business object such as a product, price list, or ship-to location that provides input to be evaluated by the rule. This input is known as votes. The voters have a specified sequence within a rule. This sequence determines the order in which a particular voter's votes are evaluated by the resolution strategy assigned to the rule.

Voters can be data objects, domain tables, or the results of other rules. For example, a voter represents a specific instance of a object that is related to the object (e.g., an order) being operated on by the calling program. (page 14, lines 10-24; emphasis added: note that "voters" as used by Applicant are not humans casting votes on issues, as taught by Chisholm)

Chisholm, col. 9, lines 35-50:

The consensus building chart allows a group to see how close or far away it is from achieving consensus, or from achieving a coalition of a particular size. If a voting has successive iterations, the graph may vary with each iteration. In that case, the graph can be updated or played back in real time, allowing voters to review an animated history of the group's preferences as they have evolved, to visually gauge the momentum towards consensus, or to pinpoint turning points or major events in the group's dynamics. FIG. 5 illustrates a consensus building chart with three successive iterations; y.sub.1, y.sub.2, and y.sub.3. The figure shows how the acceptance of the proposal has changed with each successive vote, indicating that at least some of the individual voters have modified their votes. Similarly, if y.sub.1, y.sub.2, and y.sub.3 were to indicate three different proposals, then a chart looking like FIG. 5 could be used to gauge the relative acceptance of each distinct proposal.

[Comment: this passage refers to building a consensus among humans, *i.e.* the voters.

The invention concerns business objects, not humans. The invention does not seek to build a consensus among humans, it determines a solution set for a business problem.]

col. 10, lines 55-68 to col. 11, line 3:

At the beginning of stage 1 (step H), the system examines the votes in whatever order they happen to be in, and identifies the unconditional ones (yes, no, abstain, no-vote). As the system examines each vote, it also evaluates any conditional votes that have become determinable as a result of unconditional votes now determined. Votes so determined are conditional votes that are dependent only on the unconditional votes. Then the system passes through the list again and evaluates all new votes that are dependent only on the ones previously determined, either conditional or unconditional. This process is repeated until an iteration occurs on which no new votes are determined. If all votes in the group have been determined by this process (step I), the system is finished and the results are displayed. If all votes have not been determined, we proceed to stage 2 (step J in FIG. 9A; P in FIG. 9B).

[Comment: Again, the votes being examined are votes that were cast by humans. This passage merely teaches the tabulation of votes that are human cast. It has nothing to do with votes associated with business objects. The contrast is quite striking – the invention uses the notion of a vote as a weighting for business objects; Chisholm merely uses votes in the conventional, human cast sense. Further, this passage has nothing to do with evaluating the votes in such manner that the sequence and order determines a solution set value. Chisholm is not interested in determining a solution set value, but only with tabulating human cast votes. Further, this passage does not teach or suggest that both the sequence and order in which votes are cast could affect an outcome. Rather, Chisholm only teaches a mechanism for resolving conditional votes. In fact, Chisholm teaches away from determining a solution set value based upon vote sequence and order by stating that “the system examines the votes in whatever order they happen to be in...”]

Marsh

col. 3, lines 8-11:

As mentioned previously, dynamic programming is an approach for solving optimization (maximization or minimization) problems, relying on dissecting the main optimization problem into many intermediate optimization problems.

[Comment: What is the person skilled in the art to learn from this passage? The Examiner relies upon this passage, and the next, to teach “a process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment”; and to provide a motivation for combining this teaching with Chisholm. If the inventors of the claimed invention were to give Marsh and Chisholm to a programmer, it would not be possible to build the claimed invention without providing inventive effort.]

col. 4, lines 22-28:

Moreover, most dynamic program solutions specify the optimum transition at each state of the system for every stage; thus, a dynamic programming solution can be implemented as a feedback (closed-loop) controller, in which the state of the system is constantly measured and the corresponding optimum control is applied.

[Comment: ????

col. 2, lines 21-25:

The present invention provides a processor especially designed to solve dynamic programs in a minimum of time and without the necessity of complex interprocessor communication.

[Comment: The Examiner relies upon this passage to teach the person skilled in the art that there is a motivation to solve a dynamic program with a minimum amount of time and without complex interprocessor communication. How? Marsh merely teaches a processor architecture. The Examiner is suggesting that anyone aware of Marsh's processor could adapt Chisholm's human vote tabulation system to produce the claimed business object evaluation system.]

A reference itself must sufficiently describe the claimed invention to have placed the public in possession of it.<sup>5</sup> Even if a claimed invention is disclosed in a printed publication, that disclosure will not suffice as prior art if it was not enabling.<sup>6</sup> The lack of teaching in both Chisholm and Marsh of Applicant's claimed inventive elements of:

"a rule engine... [that] evaluates ... business objects; ...administration means for allowing a user to maintain preferences for a specific instance of a business object; ... [the] rule engine ... [using] business rules to evaluate a relationship between ... [the] business objects; wherein each business object is a voter that provides votes that are evaluated by ... [the] business rules; ... rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; ... wherein a sequence of voters and an order of the votes included for each voter determine values in ... [the] solution set"

means that, not only would the skilled person be required to supply the missing elements, but that the skilled person would have to determine how to implement these elements as well. Accordingly, the Examiner's combination is fatally defective in at least two regards.

In addition to the reasons given above, the *prima facie* obviousness case is also defective because there has been no suggestion or motivation, either in the references

---

<sup>5</sup> *Paperless Accounting, Inc. v. Bay Area Rapid Transit System*, 231 USPQ 649, 653 (Fed. Cir. 1986). *Ex parte Gould*, 231 USPQ 421 (CCPA 1973).

<sup>6</sup> *Id.*



themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.<sup>7</sup>

The law requires clear and particular evidence of a suggestion, teaching, or motivation to combine references or modify reference teachings.<sup>8</sup> Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence."<sup>9</sup> In addition to demonstrating the propriety of an obviousness analysis, the Federal Circuit recognizes the value of particular factual findings regarding the suggestion, teaching, or motivation to combine because this serves a number of important purposes, including: (1) clear explication of the position adopted by the Examiner and the Board; (2) identification of the factual disputes, if any, between the applicant and the Board, and (3) facilitation of review on appeal.

Accordingly, the *prima facie* case of obviousness is lacking because there has been no showing of the legally required suggestion or motivation to modify the reference or to combine reference teachings.

Rather than a legally sufficient suggestion or motivation, modification of Chisholm to incorporate features from Marsh is simply a result of hindsight reconstruction. This amounts to simply hunting for a missing feature until it is found in some secondary reference, and then reflexively pairing this reference with the primary reference. However, it is improper to attempt to establish obviousness by using the Applicant's specification as a guide to combining different prior art references to achieve the results of the claimed invention.<sup>10</sup> The teaching or suggestion to make the claimed combination must be found in

---

7 MPEP 2142.

8 See, e.g., *C.R. Bard, Inc. v. M3 Sys., Inc.*, 48 USPQ2d 1225, 11232 (Fed. Cir. 1998).

9 See, e.g., *C.R. Bard, Inc. v. M3 Sys., Inc.*, 48 USPQ2d 1225, 11232 (Fed. Cir. 1998)

10 *Orthopedic Equipment Co., Inc. v. United States*, 702 F.2d 1005, 1012, 217 USPQ 193, 199 (Fed. Cir. 1983).

the prior art, and not based on applicant's disclosure.<sup>11</sup> The critical inquiry is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.<sup>12</sup> Obviousness is tested by what the combined teachings of the references would have suggested to those of ordinary skill in the art.<sup>13</sup> But it cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination.<sup>14</sup> And teachings of references can be combined only if there is some suggestion of incentive to do so.<sup>15</sup>

To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.<sup>16</sup> It is essential that the decision maker forget what he or she has been taught at trial about the claimed invention and cast the mind back to the time the invention was made. . . . to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted

---

11 *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

12 *In re Fritch*, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992) ("It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious."); *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 1556, 225 USPQ 26, 31 (Fed. Cir. 1985) (nothing of record plainly indicated that it would have been obvious to combine previously separate lithography steps into one process). See e.g., *In re Gordon et al.*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (mere fact that prior art could be modified by turning apparatus upside down does not make modification obvious unless prior art suggests desirability of modification); *Ex Parte Kaiser*, 194 USPQ 47, 48 (Pat. Bd. of App. 1975) (Examiner's failure to indicate anywhere in the record his reason for finding alteration of reference to be obvious militates against rejection).

13 *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

14 *ACS Hosp. Sys. Inc. v. Montefiore Hosp.*, 32 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

15 *Id.*

16 *W. L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

wisdom in the art.<sup>17</sup>

The policy of the Patent and Trademark Office<sup>18</sup> is to follow in each and every case the standard of patentability enunciated by the Supreme Court in *Graham v. John Deere Co.*<sup>19</sup>

As stated by the Supreme Court:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or non-obviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.<sup>20</sup>

Thus, hindsight reconstruction, using the applicant's specification itself as a guide, is improper because it fails to consider the subject matter of the invention "as a whole" and fails to consider the invention as of the date at which the invention was made.

In addition to the reasons stated above, the *prima facie* obviousness case is further defective because the Office Action failed to show that there would be a reasonable expectation of success in modifying/combining references.<sup>21</sup> The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.<sup>22</sup> If the

---

17 *Id.*

18 MPEP 2141.

19 148 USPQ 459 (1966).

20 148 USPQ at 467.

21 MPEP 2142, 2143.02.

22 MPEP 2142.

Examiner does not produce a *prima facie* case, the Applicant is under *no* obligation to submit evidence of nonobviousness.<sup>23</sup> Critically, to establish a *prima facie* case of obviousness, *there must be a reasonable expectation of success*.<sup>24</sup> This reasonable expectation of success must be found in the prior art, not in Applicant's disclosure.<sup>25</sup>

The Office Action lacks any evidence, allegation, or mere mention of the legally required "reasonable expectation of success." Because this mandatory topic is unaddressed by the Office Action, no *prima facie* case of obviousness has been properly established.

As shown above, Claim 1 is patentable because a *prima facie* case of obviousness does not exist. Namely, (1) the applied art fails to teach the features of the claims, (2) there is insufficient motivation to combine/modify references as proposed by the Office Action, and (3) there is no showing that an ordinarily skilled artisan would have a reasonable expectation of success in making the office action's proposed modification of references.

#### Claim 8

Applicant restates that above argument for Claim 1 with regard to Claim 8, the claim limitations being similar and the bases for rejection also being similar. As with Claim 1, based upon the above reasoning, Claim 8 is patentably distinct from the Examiner's proposed combination of references, and reversal is appropriate.

#### Claim 15

Applicant restates that above argument for Claim 1 with regard to Claim 15, the claim limitations being similar and the bases for rejection also being similar. As with Claim 1,

---

23 *Id.*

24 MPEP 2143.

25 *In re Vaeck*, 947 F.2d 488, 20 USPQ.2d 1438 (Fed. Cir. 1991). MPEP 2143.

based upon the above reasoning, Claim 15 is patentably distinct from the Examiner's proposed combination of references, and reversal is appropriate.

Claims 2-4, 6, 7, 9-11, 13, 14, 16-18, 20, and 21

Claims 2-4, 6, 7, 9-11, 13, 14, 16-18, 20, and 21 depend directly or indirectly from allowable independent Claims 1, 8, and 15, respectively. As a result, Claims 2-4, 6, 7, 9-11, 13, 14, 16-18, 20, and 21 should also be allowed at least for the same reasons as stated above with respect to Claims 1, 8, and 15.

Subparagraph (v) -- OTHER GROUNDS OF REJECTION

There are no other grounds of rejection.

### CONCLUSION

For the foregoing reasons, the claims in the application are clearly and patentably distinguished over the cited references. Accordingly, the Examiner should be reversed and ordered to pass the case to issue.

If any fees are required by this submission, an appropriate fee submittal sheet is enclosed herewith. If fees are required yet this sheet is inadvertently missing, or the fees are incorrect in amount, please charge the charge the required fees (or credit any overpayment) to Deposit Account No. 07-1445.

Respectfully submitted,



Michael Glenn

Reg. No. 30,176

USPTO Customer 22,862



## **APPENDIX A**

**Applicant's Claims 1-4, 6-11, 13-18, 20, and 21**

## APPENDIX A

### Applicant's Claims 1-4, 6-11, 13-18, 20, and 21

1. (previously amended) A process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine;

wherein said rule engine evaluates said business object;

providing administration means for allowing a user to maintain preferences for a specific instance of a business object;

wherein said rule engine uses business rules to evaluate a relationship between said business objects;

wherein each business object is a voter that provides votes that are evaluated by said business rules;

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and

wherein a sequence of voters and an order of the votes included for each voter determine values in said solution set.

2. (original) The process of claim 1, further comprising the steps of:

providing domain tables;

wherein said tables are used to define the overall set of possible values for a given attribute of a business object; and

wherein said tables are static, configured, or dynamic in nature.

3. (original) The process of claim 1, wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data; and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values.



4. (original) The process of claim 1, further comprising the step of:  
providing rule administration means for allowing a user to define business rule attributes.
5. (canceled)
6. (original) The process of claim 1, wherein said rule engine returns one solution set for the set of business objects (voters) being referenced.
7. (original) The process of claim 1, wherein said business rules are cached.
8. (previously amended) An apparatus for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising:
  - a rule engine;
  - wherein said rule engine evaluates said business objects;
  - administration means for allowing a user to maintain preferences for a specific instance of a business object;
  - wherein said rule engine uses business rules to evaluate a relationship between said business objects;
  - wherein each business object is a voter that provides votes that are evaluated by said business rules;
  - rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and
  - wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set.
9. (original) The apparatus of claim 8, further comprising:
  - domain tables;

wherein said tables are used to define the overall set of possible values for a given attribute of a business object; and

wherein said tables are static, configured, or dynamic in nature.

10. (original) The apparatus of claim 8, wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data; and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values.

11. (original) The apparatus of claim 8, further comprising:  
rule administration means for allowing a user to define business rule attributes.

12. (canceled)

13. (original) The apparatus of claim 8, wherein said rule engine returns one solution set for the set of business objects (voters) being referenced.

14. (original) The apparatus of claim 8, wherein said business rules are cached.

15. (previously amended) A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine;

wherein said rule engine evaluates said business objects;

providing administration means for allowing a user to maintain preferences for a specific instance of a business object;

wherein said rule engine uses business rules to evaluate a relationship between said business objects;

wherein each business object is a voter that provides votes that are evaluated by said business rules;

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and

wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set.

16. (original) The method of claim 15, further comprising the steps of:  
providing domain tables;

wherein said tables are used to define the overall set of possible values for a given attribute of a business object; and

wherein said tables are static, configured, or dynamic in nature.

17. (original) The method of claim 15, wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data; and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values.

18. (original) The method of claim 15, further comprising the step of:  
providing rule administration means for allowing a user to define business rule attributes.

19. (canceled)

20. (original) The method of claim 15, wherein said rule engine returns one solution set for the set of business objects (voters) being referenced.

21. (original) The method of claim 15, wherein said business rules are cached.



## **APPENDIX B**

Applicant's Figures 1-11



1/11

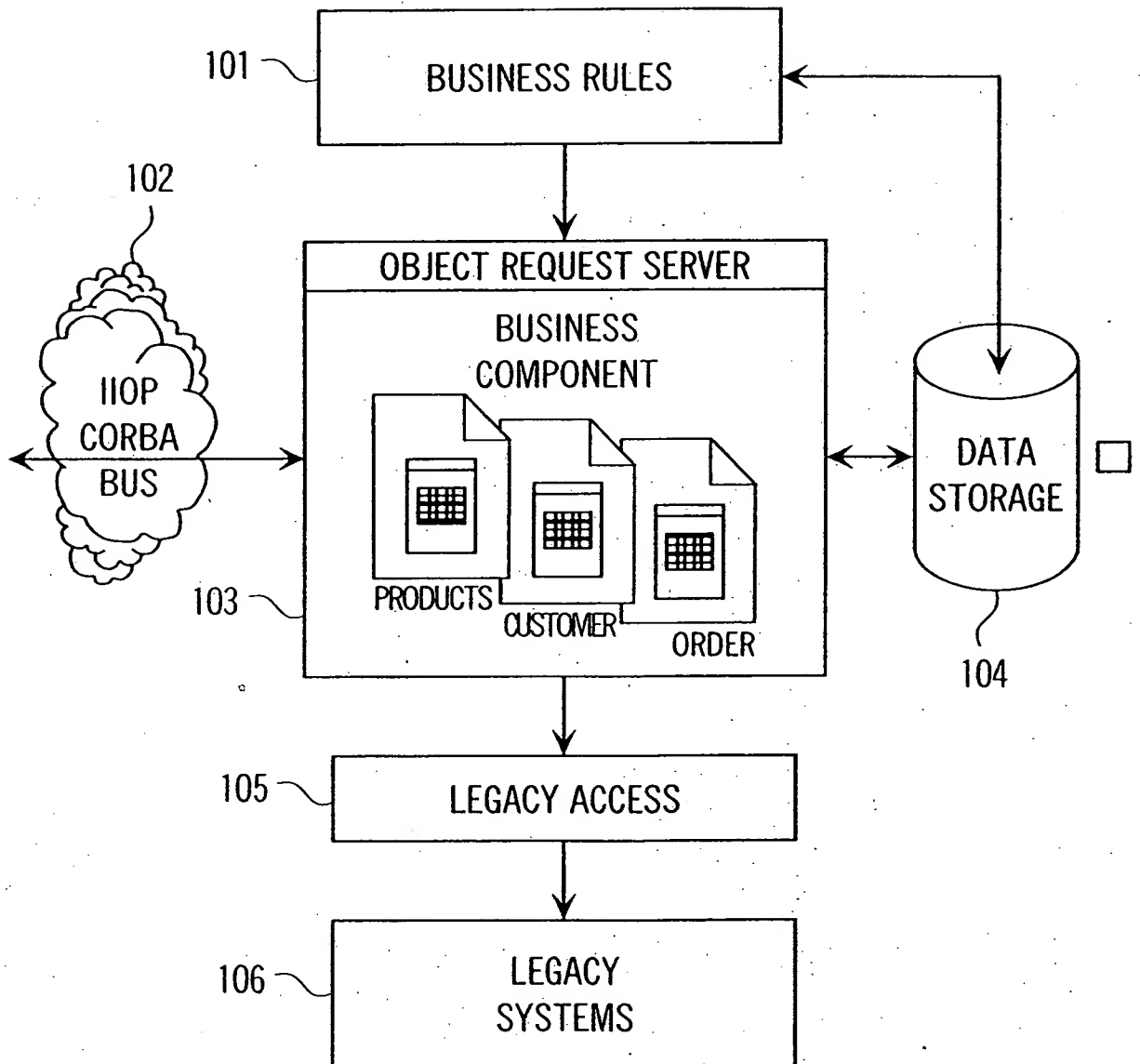


FIG. 1

2/11

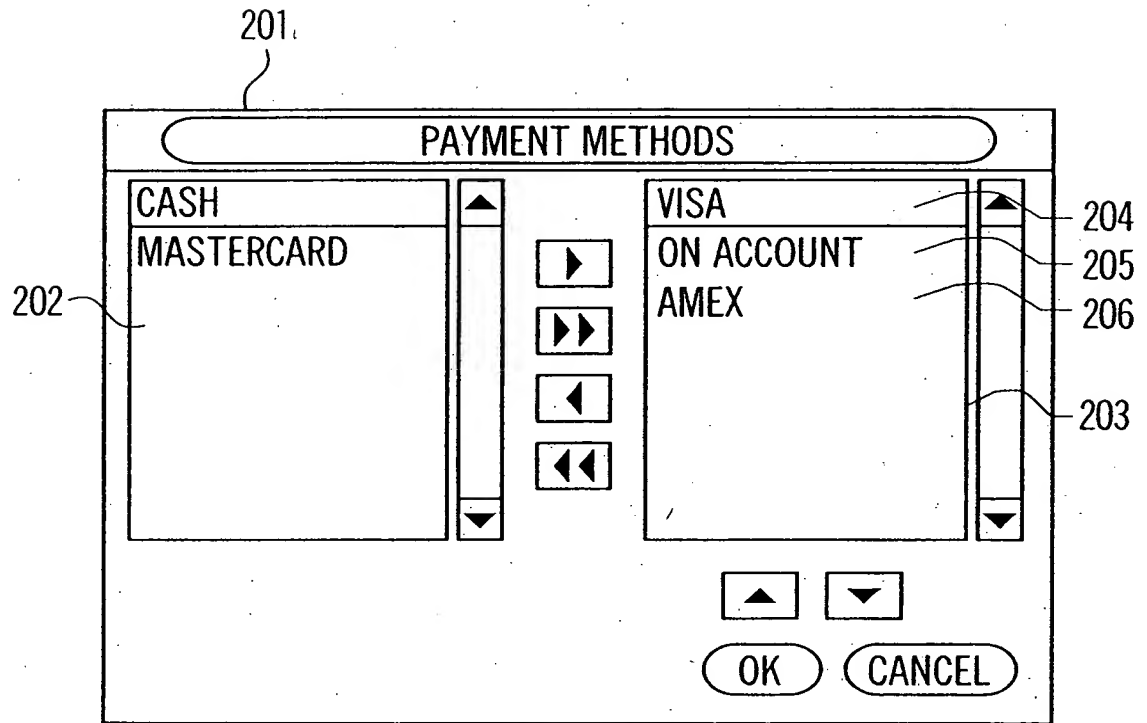


FIG. 2

VOTER	VOTES
302 ~ SELLER COMPANY	VISA, MASTERCARD, AMERICAN EXPRESS, ON-ACCOUNT ~ 303
304 ~ BUYER COMPANY	VISA, AMERICAN EXPRESS, DISCOVER, CASH, ON-ACCOUNT ~ 305
306 ~ BUYER COMPANY PERSON	ON-ACCOUNT, VISA ~ 307

FIG. 3

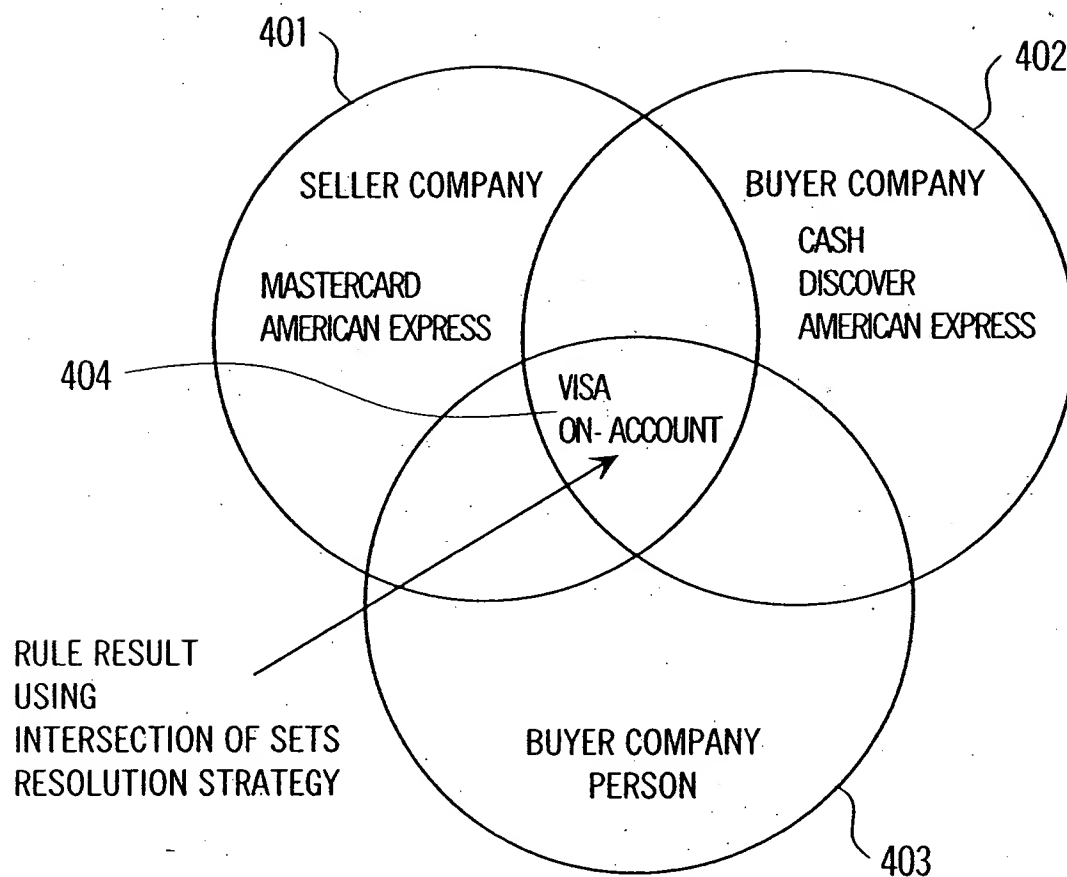


FIG. 4

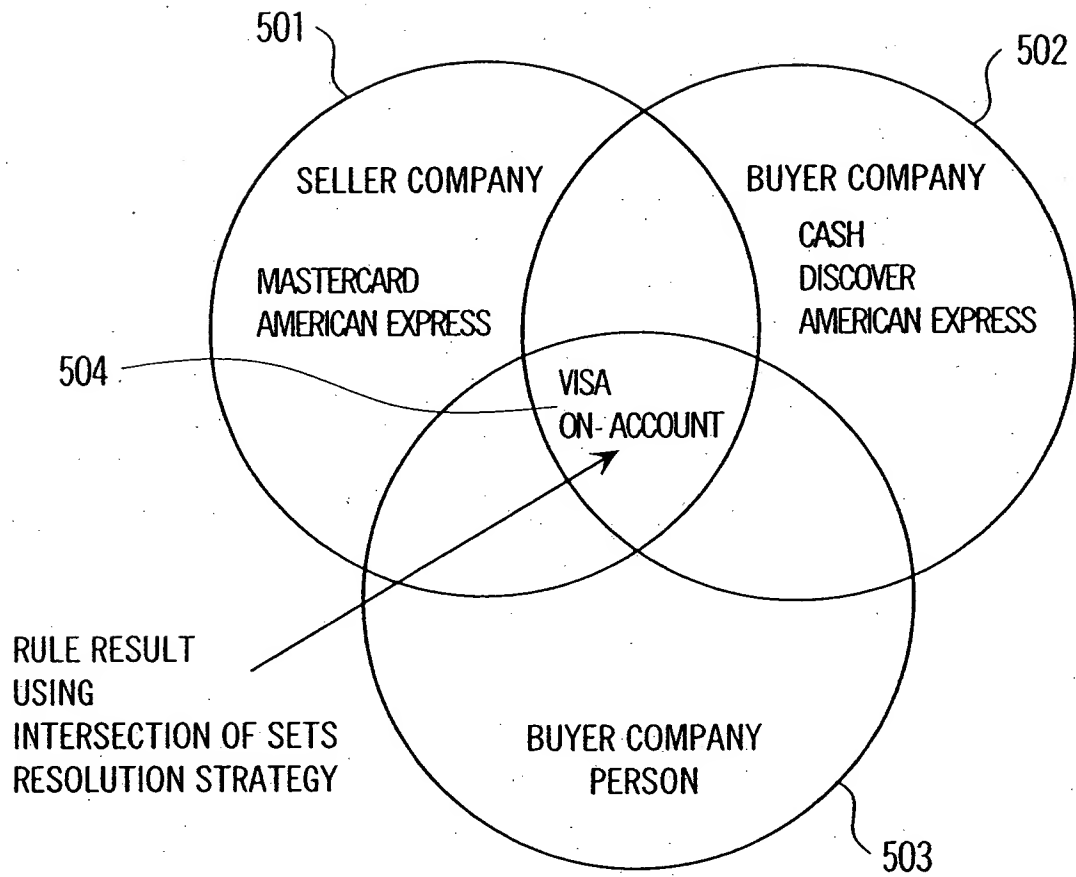


FIG. 5A



501

RESOLUTION STRATEGY	DISCUSSION	RULE RESULT (ANSWER)
502 FIRST IN FIRST OUT	503 SELLER COMPANY IS FIRST VOTER EVALUATED. VOTES APPEAR IN THE ORDER EVALUATED.	504 VISA, MASTERCARD, AMERICAN EXPRESS, ON-ACCOUNT
505 LAST IN FIRST OUT	BUYER COMPANY PERSON IS THE LAST VOTER EVALUATED. VISA WAS THE LAST VOTE EVALUATED	506 VISA, ON-ACCOUNT
508 UNION OF SETS (UOS)	SELLER COMPANY EVALUATED FIRST, AND VOTES ADDED TO THE RULE RESULT. BUYER COMPANY IS EVALUATED SECOND, AND ANY NEW VOTES ARE ADDED TO THE RESULT. BUYER COMPANY PERSON IS EVALUATED THIRD, AND IT HAS NO NEW VOTES, AND THEREFORE NONE ARE ADDED TO THE RESULT.	509 VISA, MASTERCARD, AMERICAN EXPRESS, ON-ACCOUNT, DISCOVER, CASH
511 HIGHEST	512 A UOS IS DEVELOPED. RESULTS ARE PLACED IN DESCENDING ORDER.	513 VISA, ON-ACCOUNT, MASTERCARD, DISCOVER, CASH, AMERICAN EXPRESS
514 LOWEST	515 A UOS IS DEVELOPED. RESULTS ARE PLACED IN ASCENDING ORDER.	516 AMERICAN EXPRESS, CASH, DISCOVER, MASTERCARD, ON-ACCOUNT, VISA

FIG. 5B

6/11

601



PAYMENT METHOD:  ▼ NEW...

CUSTOMER P.O. #:

SHIP VIA:  ▼

PREFERRED DELIVERY DATE (MM/DD/YY):

TOTAL GOODS AND SERVICES:	287.60
<u>ADJUSTMENTS:</u>	0.00
NET TOTAL:	287.60
SHIPPING:	6.70
TAXABLE AMOUNT:	294.30
<u>TAX:</u>	22.07
TOTAL:	316.37

FIG. 6

ADMIN HELP		BASIC	FINANCIAL	WORKFLOW	PRICING	PROCESSING	SHIPPING	LOCATIONS
BUYERXPERT ✓ RULES ➤ RULES FOR RULES ▪ DOMAIN TABLES ➤ DOMAINS ✓ MERCURY ENTERPRISES ➤ PEOPLE ➤ USER GROUPS ➤ ORGANIZATION UNITS ➤ WORKFLOW ➤ BILL-TO LOCATIONS ➤ SHIP-TO LOCATIONS ➤ SHIPPERS ➤ ORDER PROCESSING ➤ FREIGHT TERMS ▪ PREPAID ▪ NONE ▪ CUSTOMER ✓ SHIPPING METHODS ▪ FED-EX OVERNIGHT ▪ UPS NEXTDAY ▪ WILL CALL ✓ PAYMENT METHODS ➤ MASTERCARD ▪ VISA ▪ ON ACCOUNT ▪ AMEX ▪ CASH ✓ PAYMENT TERMS ➤ 2/10EOM ➤ 2/10NET30								
		<div style="text-align: center;">702</div> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center;">ORDER PROCESSING</p> <p>TRANSMIT ORDER <input type="radio"/></p> <p>ORDER SPLIT ALLOWED? <input type="radio"/></p> <p>SPLIT ORDERS BASED ON <input type="radio"/></p> <p style="margin-left: 100px;">OTHER <input type="radio"/></p> <p style="margin-left: 100px;">YES <input type="radio"/></p> <p style="margin-left: 100px;">BASED ON SHIP FROM//SHIP TO LOCATIONS <input type="radio"/></p> </div> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="text-align: center;">PAYMENT</p> <p>PAYMENT METHODS <input type="radio"/></p> <p>PAYMENT METHOD MODEL <input type="radio"/></p> <p>PAYMENT TERMS <input type="radio"/></p> <p>PAYMENT TERMS MODEL <input type="radio"/></p> <p style="margin-left: 100px;">VISA, ON-ACCOUNT, AMEX</p> <p style="margin-left: 100px;">STANDARD PAYMENT METHOD</p> <p style="margin-left: 100px;">2/10NET30, 2/10EOM</p> <p style="margin-left: 100px;">USE STANDARD IMPLEMENTATION</p> </div>						

**FIG. 7**

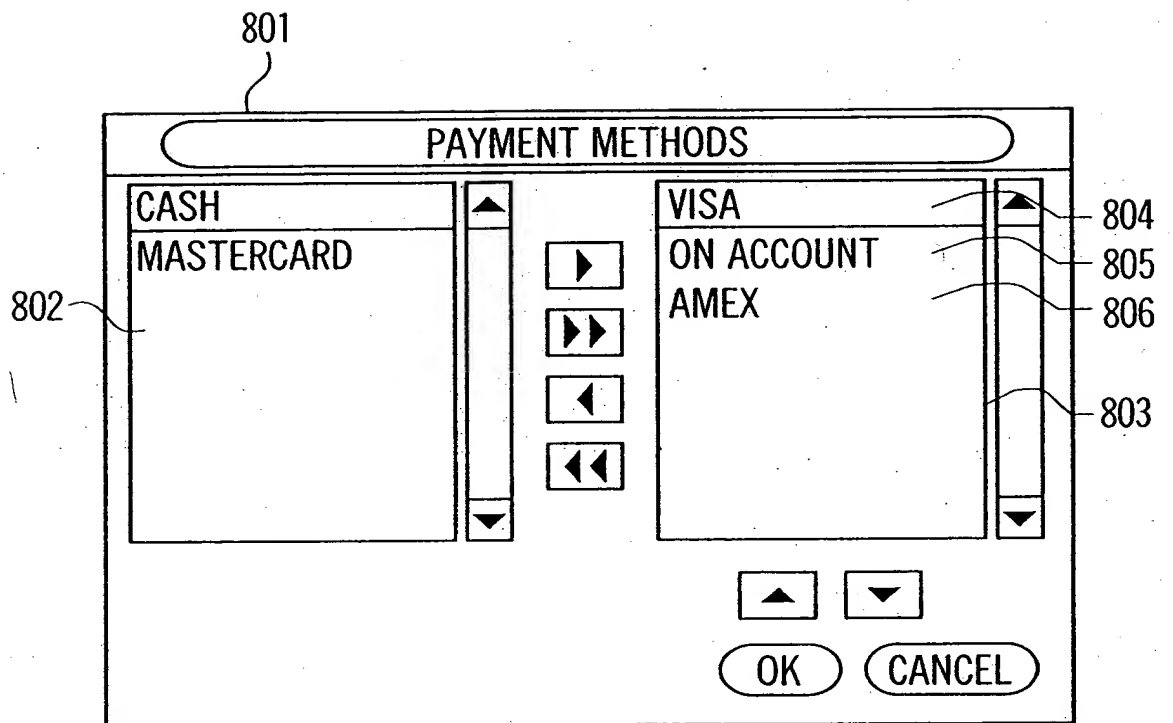


FIG. 8

9/11

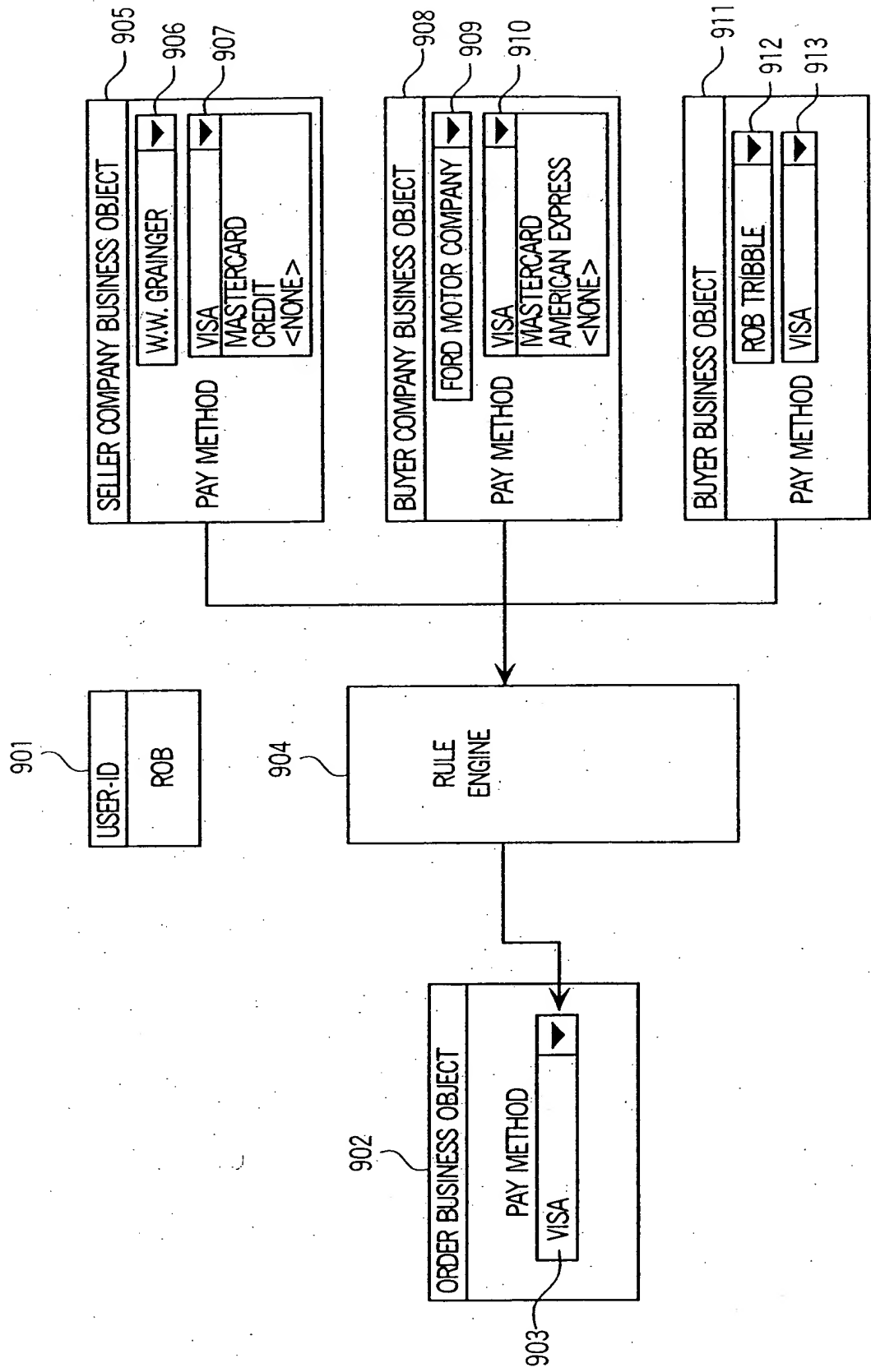


FIG. 9

10/11

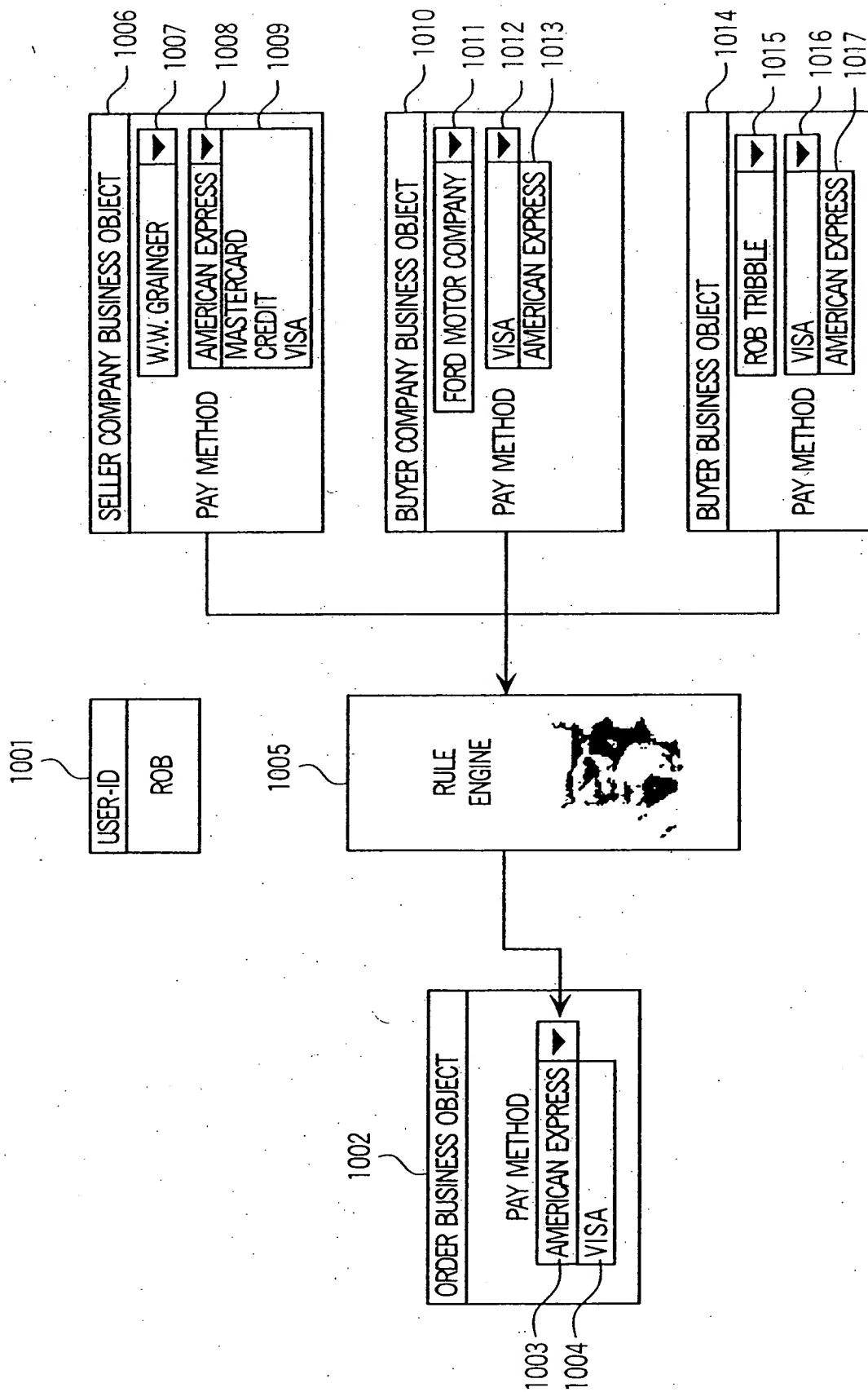


FIG. 10

11/11

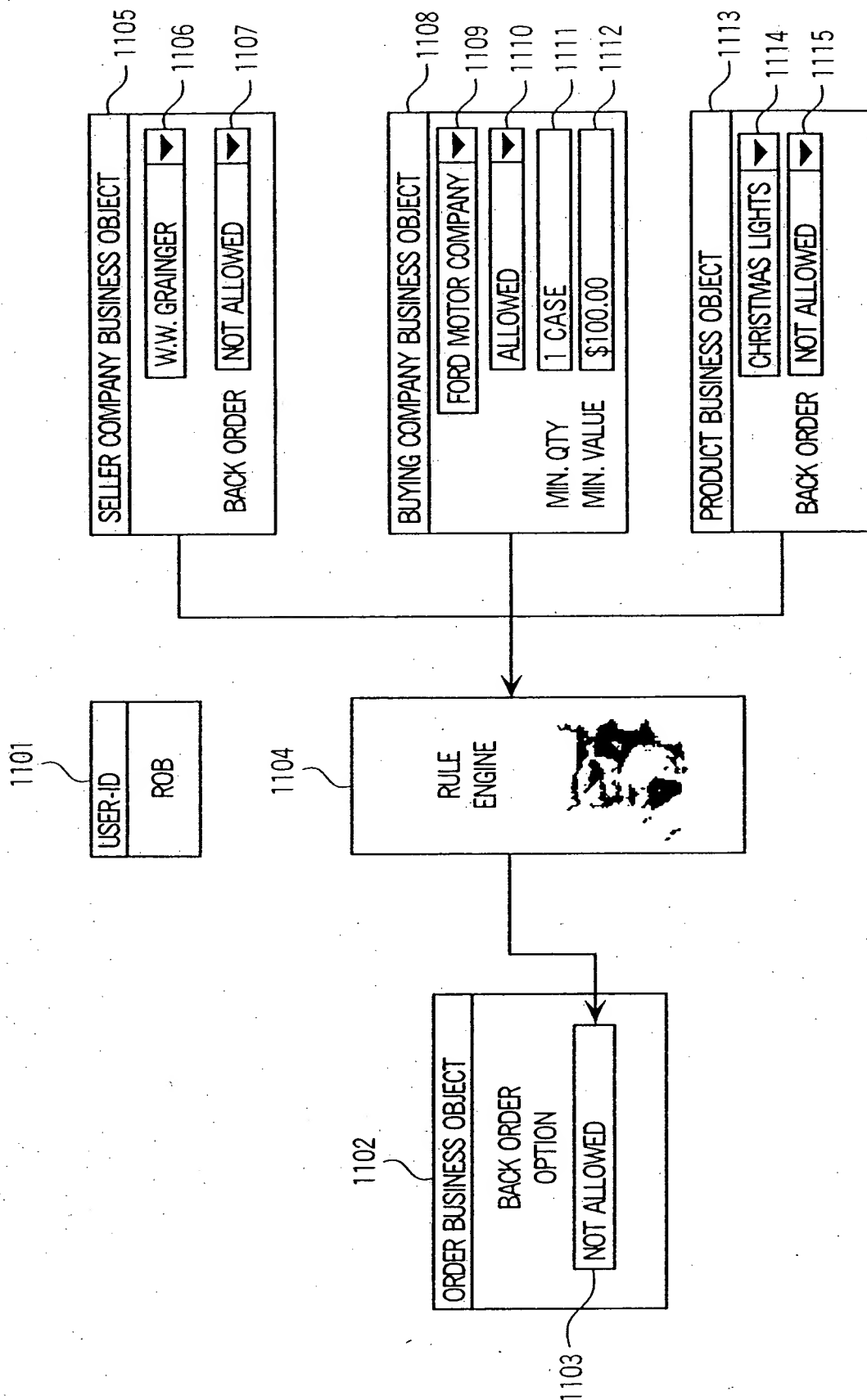


FIG. 11



## **APPENDIX C**

Copy of the Non-Final Office Action dated 8/27/04





# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,125	09/21/2000	Rob Tribble	NETS0044	1382

22862 7590 08/27/2004  
GLENN PATENT GROUP  
3475 EDISON WAY, SUITE L  
MENLO PARK, CA 94025



EXAMINER

FRENEL, VANEL

ART UNIT PAPER NUMBER

3626

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

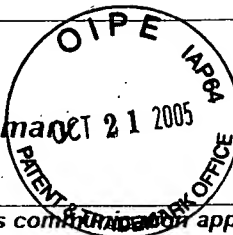
U.S.: ✓ GPG FOREIGN: \_\_\_\_\_  
DOCKETED: 9/2/04 BY: EL  
ACTION: Response due  
DUE DATE: 11/27/04  
EXT: 1ST 12/27 2ND 1/27 3RD 2/27/05  
DOCKET# NETS0044 ATTY: AC

ACKNOWLEDGE RECEIPT

SEP - 1 2004

GLENN PATENT GROUP

## Office Action Summary



Application No.

09/668,125

Applicant(s)

TRIBBLE, ROB

Examiner

Vanel Frenel

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/7/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13-18, 20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Notice to Applicant

1. This communication is in response to the Amendment filed 2/10/04. Claims 1-4, 6-11, 13-18 and 20-21 are pending.

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-11, 13-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm (5,400,248) in view of Marsh et al (4,210,962).

(A) As per claim 1, Chisholm discloses the steps of:

providing a rule engine (See Chisholm, Col.5, lines 17-34 The Examiner interprets Chisholm's voter administrator program to be a form of "rules engine");

wherein said rule engine evaluates said business objects (Col.5, lines 23-34 The Examiner interprets "votes" as "business objects");

providing administration means for allowing a user to maintain preferences for a specific instance of a business objective (Col.5, lines 12-34);

Art Unit: 3626

wherein said rule engine uses business rules to evaluate a relationship between said business objects (Col.5, lines 55-68 The Examiner understands conditional votes are votes having a relationship to other votes); and

wherein each business object is a voter that provides votes that are evaluated by said business rules (Col.5, lines 12-34);

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set (Col.5, lines 55-65; Col.8, lines 10-44);

wherein a sequence of voters and an order of the votes included for each voter determines values in said solution set (Col.9, lines 35-50; Col.10, lines 55-68 to Col.11, line 3) .

Chisholm does not explicitly disclose a process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, as recited in the preamble of claim 1.

However, this feature is known in the art, as evidenced by Marsh. In particular, Marsh suggests a process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment (See Marsh, Col.3, lines 8-11; Col.4, lines 22-28).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Marsh within the system of Chisholm with the motivation of solving dynamic programs in a minimum of time and without the necessity of complex interprocessor communication (See Marsh Col.2, lines 21-25).

(B) As per claim 2, Marsh discloses the process further comprising the steps of:

providing domain tables (Col.4, lines 28-55); wherein said tables are used to define the overall set of possible values for a given attribute of a business object (Col.5, lines 66 to Col.6, line 31 and Figs 1a-1c); and wherein said tables are static, configured, or dynamic in nature (Col.4, lines 22-28; Col.5, lines 66 to Col.6, line 31 and Figs 1a-1c).

(C) As per claim 3, Chisholm discloses the process wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data (Col.10, lines 4-30); and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values (Col.12, lines 1-45).

(D) As per claim 4, Chisholm discloses the process further comprising the step of: providing rule administration means for allowing a user to define business rule attributes (Col.16, lines 61-68 to Col.17, line 7).

(E) As per claim 6, Chisholm discloses the process wherein said rule engine returns one solution set for the set of business objects (voters) being referenced (Col.8, lines 30-68).

Art Unit: 3626

(F) As per claim 7, Chisholm discloses the process wherein said business rules are cached (Col.5, lines 10-47).

(G) Apparatus Claims 8-14 differ from method claims 1-7 by reciting an apparatus for performing the underlying process steps of method claims 1-7. Since Chisholm clearly discloses the underlying process steps recited in claims 1-7, it is readily apparent that Chisholm discloses the necessary apparatus for performing those steps. Note, for example, the recitation in Chisholm with regard to a programming interface and a network (Chisholm, Col.4, line 65 to Col.5, line 10).

The remainder of claims 8-14 repeat the same limitations addressed above in the rejections of claims 1-7, and are therefore rejected for the same reasons given for claims 1-7.

(H) Claims 15-21 differ from claims 1-7 by reciting a "program storage medium readable, tangibly embodying a program of instructions". As per this limitation, Note, for example, the recitation in Chisholm with regard to a programming interface and a network (Chisholm, Col.4, line 65 to Col.5, line 10).

The remainder of claims 15-21 repeat the same limitations addressed above in the rejections of claims 1-7, and are therefore rejected for the same reasons given for claims 1-7.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1-4, 6-11, 13-18 and 20-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with regard to the teachings of Fisk and Chacker are moot, as these references are not applied against the pending claims. Rather, it is the collective teachings of Chisholm and White that obviate the presently pending claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teaches electronic trusted party (5,117,358).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on Monday-Thursday from 6:30am-5:00pm.

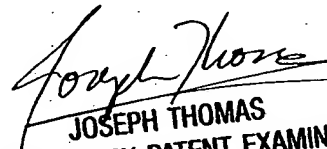
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

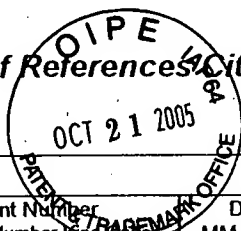
V.F  
V.F

August 20, 2004

  
JOSEPH THOMAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600



# Notice of References Cited



Application/Control No.

09/668,125

Applicant(s)/Patent Under

Reexamination

TRIBBLE, ROB

Examiner

Vanel Frenel

Art Unit

3626

Page 1 of 1

## U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,400,248	03-1995	Chisholm, John D.	705/12
	B	US-2002/0091550	07-2002	White et al.	705/4
	C	US-5,117,358	05-1992	Winkler, Peter M.	708/135
	D	US-4,210,962	07-1980	Marsh et al.	705/7
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

## FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

## NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



## **APPENDIX D**

Copy of the Final Office Action dated 2/10/05



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,125	09/21/2000	Rob Tribble	NETS0044	1382

22862 7590 02/10/2005

GLENN PATENT GROUP  
3475 EDISON WAY, SUITE L  
MENLO PARK, CA 94025

ACKNOWLEDGE RECEIPT

FEB 14 2005

GLENN PATENT GROUP

EXAMINER	
FRENEL, VANEL	
ART UNIT	PAPER NUMBER
3626	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

U.S.: ☒ GPG FOREIGN: ☐

DOCKETED: 2/15/05 BY: gk

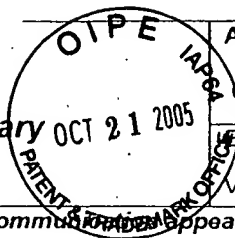
ACTION: Final Rejection

DUE DATE: 2mo 4/10 3mo 5/10/05

EXT: 1ST 6/10 2ND 7/10 3RD 8/10/05

DOCKET# NETS0044 ATTY: AC

## Office Action Summary



Application No.

09/668,125

Applicant(s)

TRIBBLE, ROB

Examiner

Vanel Frenel

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13-18, 20 and 21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4, 6-11, 13-18, 20-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Notice to Applicant

1. This communication is in response to the Amendment filed on 11/29/04. Claims 1-4, 6-11, 13-18 and 20-21 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-11, 13-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm (5,400,248) in view of Marsh et al (4,210,962), for substantially the same reasons given in the prior Office Action, and incorporated herein. Further reasons appear hereinbelow.

(A) Claims 1-4, 6-11, 13-18 and 20-21 have not been amended and are rejected for the same reasons given in the prior Office Action mailed 8/27/04, and incorporated herein.

### *Response to Arguments*

4. Applicant's arguments filed on 11/29/04 with respect to claims 1-4, 6-11, 13-18 and 20-21 have been fully considered but they are not persuasive. Applicant's arguments will be addressed in the order they appear hereinbelow.

Art Unit: 3626

At pages 2-4 of the 11/29/04 response, Applicant's argues the followings:

(1) Chilsholm and Marsh, taken alone or in combination, fail to teach, suggest, or render obvious the present invention as claimed.

(2) Chilsholm and Marsh fail to teach or suggest providing a rule engine, which evaluates a relationship objects with no prior association and uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set, as claimed in independent claims 1,8, and 15.

(3) Impermissible hindsight to combine Chilshom and Marsh.

(A) With respect to Applicant's first argument, Examiner respectfully submits that obviousness is not determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See *In re Oetiker*, 977F. 2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Hedges*, 783F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir.1992); *In re Piaseckii*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir.1984); *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

Using this standard, the Examiner respectfully submits that he has at least satisfied the burden of presenting a prima facie case of obviousness, since he has presented evidence of corresponding claim elements in the prior art and has expressly articulated the combinations and the motivations for combinations that fairly suggest Applicant's claimed invention. Note, for example, in the instant case, the Examiner respectfully

Art Unit: 3626

notes that each and every motivation to combine the applied references are accompanied by select portions of the respective reference(s) which specially support that particular motivation and /or an explanation based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness. As such, it is not seen that the Examiner's combination of references is unsupported by the applied prior art of record. Rather, it is respectfully submitted that explanation based on the logic and scientific reasoning of one of ordinarily skilled in the art at the time of the invention that support a holding of obviousness has been adequately provided by the motivations and reasons indicated by the Examiner, *Ex parte Levengood*, 28 USPQ2d 1300(Bd. Pat. App.& Inter., 4/22/93). Therefore, the combination of references is proper and the rejection is maintained.

In addition, the Examiner recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modifications. However, although the Examiner agrees that the motivation or suggestion to make modifications must be articulated, it is respectfully contended that there is no requirement that the motivation to make modifications must be expressly articulated within the references themselves.

References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969). Therefore, Applicant's argument is not persuasive.

(B) With respect to Applicant's second argument, Examiner respectfully submits that

Art Unit: 3626

He has relied upon Chisholm for the teaching of "a rule engine" which correspond to voter administrator program (See Chisholm, Col.5, lines 17-34). In addition, Examiner respectfully submits that He has relied upon Chisholm for the teaching of "each business object being a voter (See Chisholm, Col.5, lines 12-34) that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set (See Chisholm, Col.9, lines 35-50; Col.10, lines 55-68 to Col.11, line 3) which correspond to Applicant claimed feature. Therefore, Applicant argument is not persuasive.

With regard to the teaching of "evaluating a relationship objects with no prior association and uses business rules". Examiner respectfully submits that Marsh suggests "dynamic programming is an approach for solving optimization (maximization or minimization) problems, relying on dissecting the main optimization problem into many intermediate optimization problems" since Marsh has been using variables which provide an absolute optimum transition in each state space (See Marsh, Col.3, lines 8-11; Col.4, lines 22-28) which correspond to Applicant's claimed feature. Therefore, Applicant argument is not persuasive.

(C) In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does



Art Unit: 3626

not include knowledge gleaned only from the Applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on Monday-Thursday from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone numbers


Art Unit: 3626

for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

V.F  
V.F

January 31, 2005

  
JOSEPH THOMAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

**APPENDIX E**

**USPN 5,400,248**

**APPENDIX F**

**USPN 4,210,962**